

IN THE DRAWINGS

The attached sheets of drawings include changes to Figs. 1-5 and 30. These sheets, which include Figs. 1-5 and 30, replace the original sheets including Figs. 1-5, 24 and 30.

Attachment: Replacement Sheets

REMARKS/ARGUMENTS

Favorable reconsideration of this application, as presently amended and in light of the following discussion, is respectfully requested. Claims 1-5 are pending, with Claim 6 canceled and Claims 1-5 amended by the present amendment.

In the Official Action, Claim 5 was rejected under 35 U.S.C. §101; Claim 6 was rejected under 35 U.S.C. §101; Claims 1, 4, 5 and 6 were rejected under 35 U.S.C. §103(a) as being unpatentable over Yamazaki et al. (U.S. Patent Publication No. 2001/0048474, hereinafter Yamazaki) in view of Hattori et al. (U.S. Patent No. 6,937,277, hereinafter Hattori); and Claims 2 and 3 were rejected under 35 U.S.C. §103(a) as being unpatentable over Yamazaki and Hattori in view of Cohen-Solal et al. (U.S. Patent No. 7,057,636, hereinafter Cohen-Solal).

Figures 1-5 are amended to include the label "BACKGROUND ART". Figures 24 and 30 are amended to correct a typographical error. Claims 1-5 are amended to more clearly describe and distinctly claim Applicants invention. Support for this amendment is found in Applicants' originally filed Figure 6. No new matter is added.

In view of the cancellation of Claim 6 and the amendment to Claim 5, Applicants submit that the rejections under 35 U.S.C. §101 are moot.

Briefly recapitulating, Claim 4 is directed to a signal processing method extracting a high frequency signal from said input video signal including, *inter alia*,

bandpass filtering and coring the input video signal, and outputting said high frequency signal;

generating a mask by masking image quality degrading components contained in said high frequency signal, including calculating an absolute value of the high frequency signal, ***low pass filtering the absolute value***, processing a threshold of the low pass filtered absolute value, and outputting said mask;

generating a gain factor based on said mask ***and said low pass filtered absolute value***.

Yamazaki describes a method and apparatus for controlling a diaphragm of a camera. As seen in Figure 3 of Yamazaki, a signal which is converted from an analog form to a digital form in imaging circuit 34 is stored in memory 36 and an AE/AF detecting block 38. A band pass filter is provided in AE/AF detecting block 38, and a focusing condition of the subject is detected by extracting a high frequency component of an incoming video signal.¹

In a fifth embodiment, an aperture/contour correction process is performed in a signal processing part 42, as shown in Figure 20. Figure 26 of Yamazaki is a block diagram of contour correcting circuit 100. Contour correction circuit 100 includes a contour signal producing circuit 110, a multiplier 112 which multiplies a contour signal by a gain, a coring circuit 114 which reduces values of a small amplitude component of an output of the multiplier 112 to zero, and an adder 116 for adding a contour correction signal output from the coring circuit 114 to an original brightness signal.²

The Official Action appears to imply that the high frequency extraction by AE/AF detecting block 38 is related to Applicants' invention or to the contour correction circuit 100 of Yamazaki. Elsewhere, the Official Action acknowledges that Yamazaki does not disclose or suggest generating a contour correction signal based upon an extracted high frequency signal. Applicants concur that Yamazaki does not disclose or suggest generating a mask by masking image quality degrading components contained in a high frequency signal. The fact that AE/AF detecting block 38 extracts high frequency signals has no bearing on the contour correction circuit 100 of Yamazaki shown in Figures 20 and 26.

While acknowledging that Yamazaki does not disclose or suggest generating a mask by masking image quality degrading components contained in a high frequency signal, the Official Action speculates that "the contour signal producing circuit (110) ... is most likely used to extract a high frequency signal for contour correction." Applicants submit that this

¹ Yamazaki, paragraph [0071].

² Yamazaki, paragraph [0181].

speculation is unsupported by any disclosure of Yamazaki. Furthermore, this speculation is extraneous because, to cure the deficiencies of Yamazaki, the Official Action cites Hattori.

Hattori describes a contour correction signal generating circuit 807 which extracts a high frequency component from a video signal to generate a contour correction signal.³

However, Hattori does not disclose or suggest a method that includes

bandpass filtering and coring the input video signal, and outputting said high frequency signal;

generating a mask by masking image quality degrading components contained in said high frequency signal, including calculating an absolute value of the high frequency signal, *low pass filtering the absolute value*, processing a threshold of the low pass filtered absolute value, and outputting said mask;

generating a gain factor based on said mask *and said low pass filtered absolute value*.

Hattori also does not disclose or suggest a device or computer readable medium as recited in Applicants' amended Claims 1 and 5, respectively.

Applicants have considered Cohen-Solal and submit Cohen-Solal does not cure the deficiencies of Yamazaki and Hattori. As none of the cited prior art, individually or in combination, disclose or suggest all the elements of independent Claims 1, 4 and 5, Applicants submit the inventions defined by Claims 1, 4 and 5, and all claims depending therefrom, are not rendered obvious by the asserted references for at least the reasons stated above.⁴

³ Hattori, column 14, lines 29-46.

⁴ MPEP § 2142 "...the prior art reference (or references when combined) must teach or suggest all the claim limitations.

Accordingly, in view of the present amendment and in light of the previous discussion, Applicants respectfully submit that the present application is in condition for allowance and respectfully request an early and favorable action to that effect.

Respectfully submitted,

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